

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A method for producing an optical component of quartz glass ~~[by]~~, **said method comprising:** elongating a coaxial arrangement of a core rod and a hollow cylinder of a predetermined length in that the coaxial arrangement is supplied in vertical orientation to a heating zone and is softened therein zonewise, starting with a ~~[its]~~ lower end **thereof**, and the component is drawn off downwards from a ~~[the]~~ softened region, the hollow cylinder having an inner bore which in a ~~[the]~~ region of a ~~[its]~~ lower end **thereof** is provided with a constriction on which the core rod is supported, ~~[characterized in that]~~ **wherein** the constriction of the inner bore ~~[(5)]~~ is produced in a first upper hollow cylinder ~~[(1) in that,]~~ **wherein**

a) the first upper hollow cylinder ~~[(1)]~~ is fused at a ~~[the]~~ front side with a second lower hollow cylinder ~~[(6) with formation of]~~ **so as to form** an axial cylinder composite ~~[(3)]~~,

b) a core rod ~~[(4)]~~ is introduced into the lower hollow cylinder ~~[(6)]~~, and the axial cylinder composite ~~[(3)]~~ is supplied to the heating zone ~~[(49)]~~, starting with its lower end, and is softened therein zonewise and elongated ~~[with formation of]~~ **so as to form** the optical component ~~[(8)]~~,

c) a drawing bulb ~~[(9)]~~ being formed progressing in the cylinder composite ~~[(3)]~~ to the first upper hollow cylinder ~~[(6)]~~, within ~~[which]~~ **said** bulb, the inner bore ~~[(5)]~~ **being** ~~[is]~~ collapsed at least in part, ~~[thereby producing]~~ **so as to produce** the constriction of the inner bore ~~[(5)]~~,

d) the first hollow cylinder ~~[(1)]~~ is separated at a separation plane in an ~~[the]~~ area of the constriction from the withdrawn optical component ~~[(8)]~~ and

e) the first hollow cylinder is subsequently elongated [~~for producing~~] so as to produce an optical component together with a core rod in a coaxial arrangement.

2. (currently amended) The method according to claim 1, [~~characterized in that~~] wherein the first hollow cylinder [(1)] is subsequently used as the second hollow cylinder [(6)].

3. (currently amended) The method according to claim 1, [~~characterized in that~~] wherein the upper hollow cylinder [(4)] is used in the elongation process for holding the lower hollow cylinder [(6)].

4. (currently amended) The method according to claim 1 [~~any one of the preceding claims, characterized in that~~] wherein the constriction in the area of the separation plane [(10)] [~~comprises~~] has an axially continuous opening.

5. (currently amended) The method according to claim 1 [~~any one of the preceding claims, characterized in that~~] wherein the elongation process comprises a drawing phase and a drawing end phase, and [~~that~~] wherein during the drawing phase a negative pressure is produced in the inner bore [(5) ~~in comparison with the~~] relative to an externally applied pressure.

6. (currently amended) The method according to claim 5, [~~characterized in that~~] wherein the pressure in the inner bore [(5)] is increased in the drawing end phase.

7. (currently amended) The method according to claim 6, [~~characterized in that~~] wherein the pressure in the inner bore is increased in the drawing end phase to a value in the range of an [~~the~~] ambient pressure +/- 50 mbar.

8. (currently amended) The method according to claim 1 [~~any one of the preceding claims, characterized in that~~] wherein a plunger [(34)] which has a smaller outer diameter than the core rod [(4)] is used in the inner bore [(5, 36)] above the core rod [(4)].

9. (currently amended) The method according to claim 1 [~~any one of the preceding claims, characterized in that~~] wherein the upper end of the core rod [(4)] extends into the inner bore [(5)] of the upper hollow cylinder [(1)].

10. (currently amended) The method according to claim 9, [~~characterized in that~~] wherein the upper end of the core rod [(4)] extends up and into a [~~the~~] region of half the length of the upper hollow cylinder [(4)].

11. (currently amended) The method according to claim 1 [~~any one of the preceding claims, characterized in that~~] wherein at least one of the upper hollow cylinder and the lower hollow cylinder has at least one of a beveled [~~the~~] inner diameter and a beveled [~~for the~~] outer diameter [~~of the upper hollow cylinder (1) and/or of the lower hollow cylinder (6) are beveled~~].

12. (currently amended) The method according to claim 1 [~~any one of the preceding claims, characterized in that~~] wherein the [~~inner diameters of~~] upper hollow cylinder [(1)] and lower hollow cylinder [(6)] have inner diameters that differ by not more than +/- 2 mm from each other, and the [~~outer diameters of~~] upper hollow cylinder [(1)] and lower hollow cylinder [(6)] have outer diameters that differ by not more than +/- 3 mm from each other.

13. (currently amended) The method according to claim 1 [~~any one of the preceding claims, characterized in that~~] wherein the inner bore [(5)] of [~~a~~] the first upper hollow cylinder [(1)] is mechanically machined to a final dimension.

14. (new) The method according to claim 2, wherein the constriction in an area of the separation plane has an axially continuous opening.

15. (new) The method according to claim 3, wherein the constriction in an area of the separation plane has an axially continuous opening.

16. (new) The method according to claim 2, wherein the upper end of the core rod extends into the inner bore of the upper hollow cylinder.

17. (new) The method according to claim 3, wherein the upper end of the core rod extends into the inner bore of the upper hollow cylinder.

18. (new) The method according to claim 4, wherein the upper end of the core rod extends into the inner bore of the upper hollow cylinder.

19. (new) The method according to claim 2, wherein the upper hollow cylinder and/or the lower hollow cylinder has an inner diameter and/or an outer diameter that is beveled.

20. (new) The method according to claim 3, wherein the upper hollow cylinder and/or the lower hollow cylinder has an inner diameter and/or an outer diameter that is beveled.

21. (new) The method according to claim 4, wherein the upper hollow cylinder and/or the lower hollow cylinder has an inner diameter and/or an outer diameter that is beveled.